

REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections and further examination are requested. Upon entry of this amendment, claim 1 is amended. No new matter has been added.

The amendments to the claims are supported at least on page 21, line 18 through page 22, line 10 and page 33, lines 4-21.

Rejections Under 35 U.S.C. §102(b)

Claims 1, 4 and 5 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Imamura et al. (US 2004/0033399).

Applicants submit that the claims as now pending are allowable over the cited prior art. Specifically, amended independent claim 1 recites a fuel cell system wherein a controller is configured to calculate a voltage deviation for each fuel cell, for each fuel cell, the voltage deviation being a difference between a voltage of the fuel cell and an average value of the voltages of a plurality of fuel cells at each predetermined time of a plurality of predetermined times, and configured to increase or decrease the fuel supply amount of each fuel cell according to the voltage deviation of each fuel cell while conforming a sum of the fuel supply amounts of the plurality of fuel cells to the total fuel supply amount according to the required power of a load device and/or increase or decrease the air supply amount of each fuel cell according to the voltage deviation of each fuel cell while conforming a sum of the air supply amounts of the plurality of fuel cells to the total air supply amount according to the required power of the load device.

This structure enables the present invention, as recited in claim 1, to reduce the voltage variations of the fuel cells and stabilize the power generated by the fuel stack. Such a device is not disclosed nor rendered obvious by the cited art. In particular, the Examiner states that Imamura is inherently configured to control the fuel supply of reactants based on load demands. See pg. 6 of the April 15, 2011 Office Action. However, even assuming that the Examiner's position is correct, amended independent claim 1 now recites that the controller is configured to increase or decrease the fuel supply amount of each fuel cell according to the voltage deviation of each fuel cell while conforming a sum of the fuel supply amounts of the plurality of fuel cells to the total fuel supply amount according to the required power of a load device and/or increase

or decrease the air supply amount of each fuel cell according to the voltage deviation of each fuel cell while conforming a sum of the air supply amounts of the plurality of fuel cells to the total air supply amount according to the required power of the load device. Thus, the sum of the fuel supply amounts for each fuel cell is equal to the total fuel supply amount based on the power required by the load device.

Additionally, the Examiner suggests that Imamura discloses controlling the hydrogen supplied to the individual fuel cells. See pg. 2 of the April 15, 2011 Office Action. Applicants respectfully disagree and submit that the paragraphs cited by the Examiner in Imamura merely discloses setting the amount of the fuel stack, not supplying each individual fuel cell with fuel based on an amount set for each cell. Thus, as is clear, Imamura fails to disclose a controller configured to increase or decrease the amount of fuel of each fuel cell, as required by independent claim 1 of the present application.

Moreover, Applicants submit that there is no reasoning in the prior art to modify Imamura such that it would have rendered independent claim 1 obvious. Therefore, Applicants submit that independent claim 1 and its dependent claims are allowable over the cited prior art.

Rejections Under 35 U.S.C. §103(a)

Claim 3 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Imamura et al., and further in view of Enjoji et al. (US 2004/0185315). Claims 6 and 7 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Imamura et al. and further in view of Kozu et al. (US 2005/0014043).

Applicants submit that since each of these claims is dependent from claim 1 and since neither Enjoji nor Kozu overcome the deficiencies of Imamura, each of these claims is allowable for the reasons set forth above.

Conclusion

In view of the foregoing amendments and remarks, all of the claims now pending in this application are believed to be in condition for allowance. Reconsideration and favorable action are respectfully solicited.

Should the Examiner believe there are any remaining issues that must be resolved before this application can be allowed, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

Masahiro TAKADA et al.

/Jeffrey J. Howell/

By _____
2011.07.15 15:42:35 -04'00'

Jeffrey J. Howell
Registration No. 46,402
Attorney for Applicants

JJH/etc
Washington, D.C. 20005-1503
Telephone (202) 721-8200
Facsimile (202) 721-8250
July 15, 2011